

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in this application.

Listing of Claims:

1. (Currently Amended) [[A]] An aqueous ready to use semen extender composition comprising:
 - (a) about 0.1 wt.% to about 6 wt.% phospholipid obtained from a non-animal source;
 - (b) ~~effective amount~~ about 0.0001 wt.% to about 1 wt.% of surfactant to reduce ice crystal formation during freezing of the composition;
 - (c) about 0.5 wt.% to about 3 wt.% carbohydrate;
 - (d) about 3 wt.% to about 14 wt.% freeze agent; and
 - ~~(d)~~ (e) biological buffer to provide ~~a semen extender use solution having the~~ composition with a pH of about 6.9 to about 7.5, and wherein the ~~use solution~~ composition comprises a sufficient amount of water so that the composition exhibits an osmolality of about 250 mOsM to about 350 mOsM.
2. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the composition comprises at least about 90 wt.% water.
3. (Canceled)
4. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, further comprising:
 - (a) antioxidant.
5. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 4, wherein the antioxidant comprises at least one of vitamin E, vitamin C, vitamin A, BHA, BHT, and or derivatives thereof.

6. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the source of non-animal phospholipid comprises lecithin.
7. (Canceled)
8. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the surfactant comprises at least one of an anionic surfactant, a cationic surfactant, a nonionic surfactant, an amphoteric surfactant, and a zwitterionic surfactant.
9. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the surfactant comprises at least one of sodium lauryl sulfate, sodium laureth sulfate, sorbitan esters, polyglycerol esters, glycerol esters, and mixtures thereof.
10. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the surfactant comprises polyoxyethylene sorbitan.
11. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, ~~further comprising~~ wherein the freeze agent comprises at least one of glycerol or dimethylsulfoxide.
~~(a) — freeze agent comprising at least one of glycerol and dimethylsulfoxide.~~
12. (Canceled)
13. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, wherein the composition is substantially free of animal products.
14. (Currently Amended) [[A]] An aqueous ready to use semen extender composition according to claim 1, further comprising semen.
- 15-20. (Canceled)

21. (Currently Amended) A method for manufacturing ~~[[a]]~~ an aqueous ready to use semen extender composition, the method comprising a step of:

(a) mixing semen extender composition components to provide a semen extender composition having an osmolality of about 250 mOsM to about 350 mOsM and a pH of about 6.9 to about 7.5, the semen extender composition components comprising:

(i) about 0.1 wt.% to about 6 wt.% phospholipid obtained from a non-animal source;

(ii) ~~effective amount~~ about 0.0001 wt.% to about 1 wt.% of surfactant to reduce ice crystal formation during freezing of the composition,

(iii) about 0.5 wt.% to about 3 wt.% carbohydrate;

(iv) about 3 wt.% to about 14 wt.% freeze agent;

~~(iv)~~ (v) water; and

~~(v)~~ (vi) biological buffer.

22. (Currently Amended) A method according to claim 21, wherein the ~~semen extender components further comprise a freeze agent comprising~~ comprises at least one of glycerol and or dimethylsulfoxide.

23. (Canceled)

24. (Currently Amended) ~~[[A]]~~ An aqueous ready to use semen extender composition according to claim 1, wherein the composition comprises at least about 1 IU/ml antioxidant.

25. (Currently Amended) ~~[[A]]~~ An aqueous ready to use semen extender composition according to claim 1, wherein the composition comprises ~~about 1 IU/ml to~~ at least about 5 IU/ml antioxidant.

26. (Currently Amended) ~~[[A]]~~ An aqueous ready to use semen extender composition according to claim 1, wherein the composition comprises about 1 wt.% to about 3 wt.% antioxidant.

27. (Canceled)
28. (Previously Presented) A method according to claim 21, wherein the composition comprises at least about 1 IU/ml antioxidant.
29. (Currently Amended) A method according to claim 21, wherein the composition comprises ~~about 1 IU/ml to~~ at least about 5 IU/ml antioxidant.
30. (Previously Presented) A method according to claim 21, wherein the composition comprises about 1 wt.% to about 3 wt.% antioxidant.
31. (Currently Amended) A method according to claim ~~[[29]]~~ 28, wherein the antioxidant comprises at least one of vitamin E, vitamin C, vitamin A, BHA, BHT, ~~and~~ or derivatives thereof.
32. (Canceled)

Support for Amendment

The composition claims have all been amended to characterize the composition as an aqueous ready to use semen extender composition. In addition, claim 21 has been amended to characterize the method as a method for manufacturing an aqueous ready to use semen extender composition. Support for this amendment is provided by the specification at, for example, page 4, lines 3-7 and 19-25.

Independent claims 1 and 21 are amended to characterize the presence of about 0.0001 wt.% to about 1 wt.% of surfactant to reduce ice crystal formation during freezing of the composition. This amendment is supported by the specification at, for example, page 6, lines 20-31. Independent claims 1 and 21 are amended to characterize the presence of about 0.5 wt.% to about 3 wt.% carbohydrate. This amendment is supported by the specification at, for example, page 5, line 24 through page 6, line 3. Independent claims 1 and 21 are amended to characterize the presence of about 3 wt.% to about 14 wt.% freeze agent. This amendment is supported by the specification at, for example, page 7, lines 16-21.

Dependent claims 25 and 29 are amended to characterize a range of antioxidant. These changes are supported by the specification at, for example, page 7, lines 9-15.

Claims 11 and 22 are amended to correct antecedent in view of the amendment to claims 1 and 21. In addition, claims 5 and 31 are amended to depend on claims 1 and 21 in view of the amendment to claims 1 and 21.

Claims 5, 11, 22, and 31 are amended to more clearly reflect that the list of components identified in the claims is provided in the alternative.

No new matter is introduced by this amendment, and entry thereof is requested. Upon entry, claims 1, 2, 4-6, 8-11, 13, 14, 21, 22, 24-26, and 28-31 are active in this application.